



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
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Photometric Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
Auroralight Inc

2742 Loker Avenue West
Carlsbad
CA, 92010
United States

Catalog Number

HPL8-5-27

Order Number

11745044

Test Number

11745044.25

Test Date

2017-05-18

Prepared By

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Approved By

Tiffany Hamm, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Conical 8" copper shade with clear glass lens, cylindrical copper stem and brass base
Lamp: 64 white LEDs
Mounting: Path/Area
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Diameter: 8.00 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Semicutoff
BUG Rating: B0 U1 G0

Test Conditions

Test Temperature: 25.8 °C
Voltage: 12.00 VAC
Current: 0.6197 A
Power: 4.648 W
Power Factor: 0.625
Frequency: 60 Hz
Current THD: 72.0 %

Tested in 30 planes left side, 30 planes right side, left and right averaged
Vertical test increments are 2.5 degrees
Test distance exceeds five times the greatest luminous opening of luminaire

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.8 °C	12.00 VAC	0.6197 A	4.648 W	0.625	60 Hz	72.0 %

Summary of Results

Spacing Criteria

0-180: 1.27

90-270: 1.27

Total Lumen Output:

197.0 Lumens

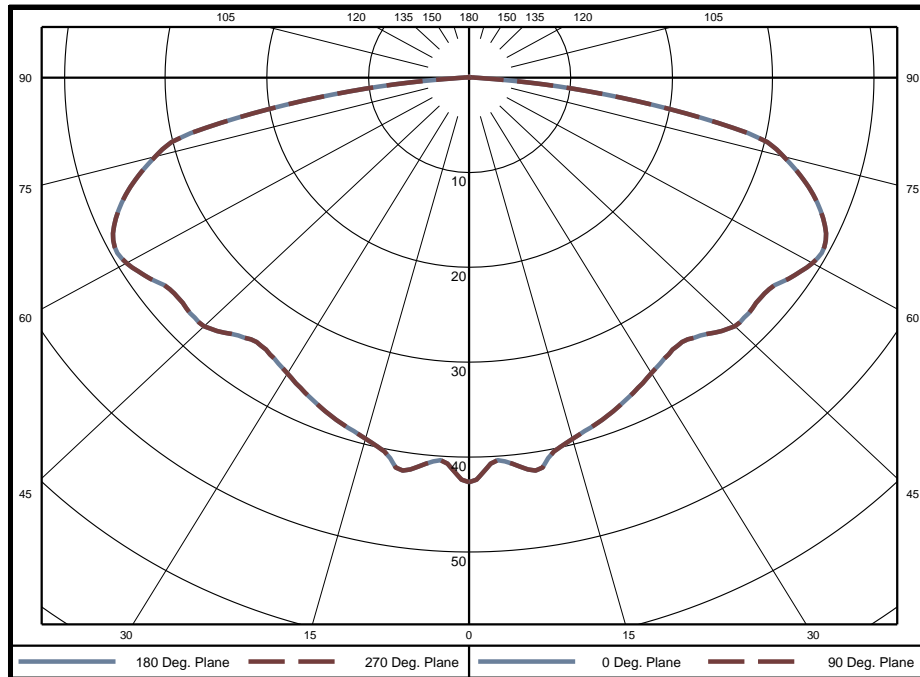
Luminaire Efficacy:

42.4 lm/w

Maximum Candela:

43 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.98	0.5%	60-65	19.07	9.7%	120-125	0.02	0.0%
5-10	2.97	1.5%	65-70	19.04	9.7%	125-130	0.02	0.0%
10-15	4.77	2.4%	70-75	17.88	9.1%	130-135	0.02	0.0%
15-20	6.41	3.3%	75-80	15.14	7.7%	135-140	0.02	0.0%
20-25	7.93	4.0%	80-85	7.39	3.8%	140-145	0.02	0.0%
25-30	9.26	4.7%	85-90	1.09	0.6%	145-150	0.02	0.0%
30-35	10.44	5.3%	90-95	0.21	0.1%	150-155	0.02	0.0%
35-40	11.71	5.9%	95-100	0.08	0.0%	155-160	0.01	0.0%
40-45	13.45	6.8%	100-105	0.05	0.0%	160-165	0.01	0.0%
45-50	14.99	7.6%	105-110	0.04	0.0%	165-170	0.01	0.0%
50-55	16.14	8.2%	110-115	0.03	0.0%	170-175	0.01	0.0%
55-60	17.76	9.0%	115-120	0.03	0.0%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	54	27.6%
0-60	117	59.3%
0-90	196	99.7%
90-180	1	0.3%



Candela Tabulation
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	42.65	42.65	42.65	42.65	42.65	42.65	42.65	42.65	42.65	42.65	42.65	42.65	42.65	42.65	42.65
	5	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62
	10	41.75	41.75	41.75	41.75	41.75	41.75	41.75	41.75	41.75	41.75	41.75	41.75	41.75	41.75	41.75
	15	39.43	39.43	39.43	39.43	39.43	39.43	39.43	39.43	39.43	39.43	39.43	39.43	39.43	39.43	39.43
	20	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40
	25	37.21	37.21	37.21	37.21	37.21	37.21	37.21	37.21	37.21	37.21	37.21	37.21	37.21	37.21	37.21
	30	35.97	35.97	35.97	35.97	35.97	35.97	35.97	35.97	35.97	35.97	35.97	35.97	35.97	35.97	35.97
	35	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
	40	35.49	35.49	35.49	35.49	35.49	35.49	35.49	35.49	35.49	35.49	35.49	35.49	35.49	35.49	35.49
	45	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07
	50	36.95	36.95	36.95	36.95	36.95	36.95	36.95	36.95	36.95	36.95	36.95	36.95	36.95	36.95	36.95
	55	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60
	60	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11
	65	38.85	38.85	38.85	38.85	38.85	38.85	38.85	38.85	38.85	38.85	38.85	38.85	38.85	38.85	38.85
	70	36.13	36.13	36.13	36.13	36.13	36.13	36.13	36.13	36.13	36.13	36.13	36.13	36.13	36.13	36.13
	75	32.11	32.11	32.11	32.11	32.11	32.11	32.11	32.11	32.11	32.11	32.11	32.11	32.11	32.11	32.11
	80	21.71	21.71	21.71	21.71	21.71	21.71	21.71	21.71	21.71	21.71	21.71	21.71	21.71	21.71	21.71
	85	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89
	90	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
	95	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	100	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
	105	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
	110	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	115	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	120	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	125	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	130	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	135	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	140	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	145	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	150	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	155	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	160	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	165	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	170	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	175	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	180	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07

Average Luminance (cd/m²)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)			
	0	45	90	
	0	1315	1315	1315
	45	1617	1617	1617
	55	2021	2021	2021
	65	2835	2835	2835
	75	3826	3826	3826
	85	2084	2084	2084



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	234	234	234	234	229	229	229	229	219	219	219	209	209	209	200	200	200	196
1	207	195	183	173	201	190	180	170	181	173	165	173	166	159	165	160	155	150
2	183	163	145	131	177	159	143	129	151	138	126	144	133	123	138	128	120	115
3	164	138	118	103	158	135	116	102	128	113	100	122	109	98	117	105	96	91
4	148	119	99	83	143	117	97	82	111	94	81	106	92	80	102	89	78	73
5	134	105	84	69	130	102	83	68	98	81	68	94	78	67	90	76	66	61
6	123	93	73	59	119	91	72	58	87	70	57	84	68	57	80	67	56	51
7	114	84	64	51	110	82	63	50	79	62	50	75	60	49	73	59	49	44
8	105	76	57	44	102	74	56	44	71	55	44	69	54	43	66	53	43	39
9	98	69	51	39	95	68	51	39	65	50	39	63	49	38	61	48	38	34
10	92	64	47	35	89	62	46	35	60	45	35	58	44	35	56	44	34	31

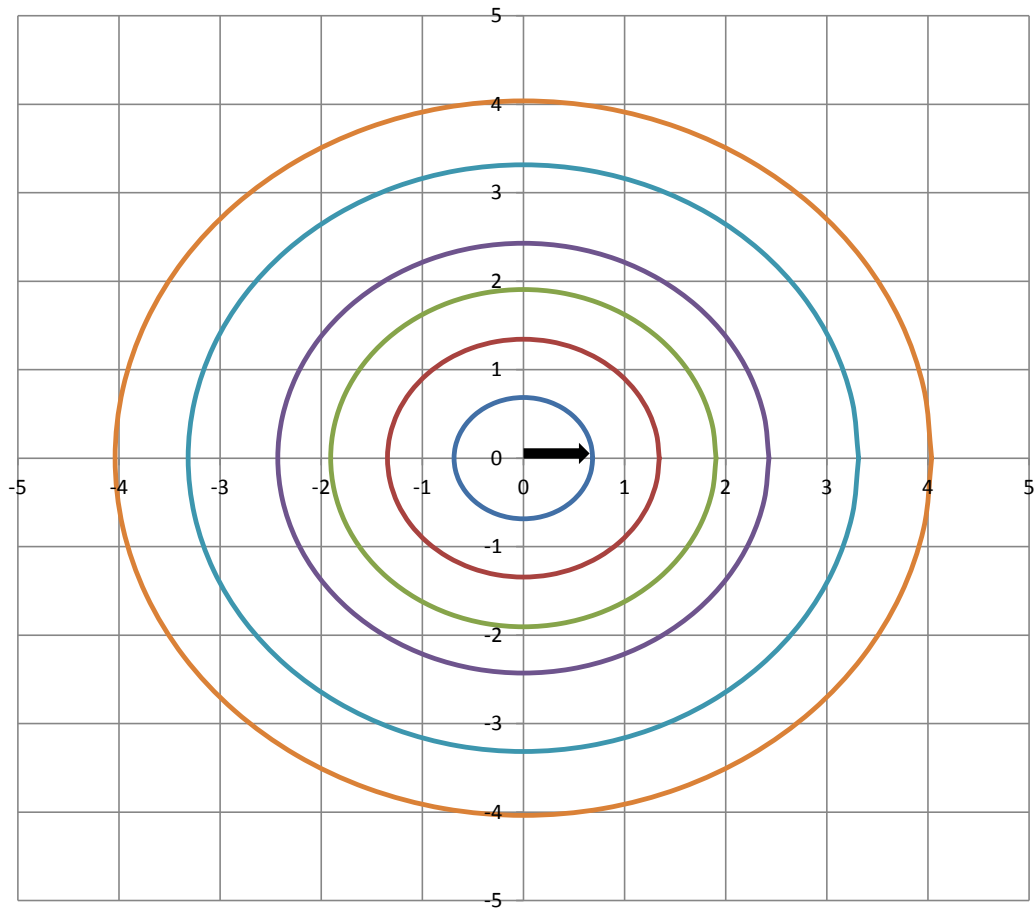
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	42.65 Candela
Central Cone Intensity:	41 Candela
Beam Flux:	188.3 Lumens
Beam Angle (0-180):	160.2 Degrees
Beam Angle (90-270):	160.2 Degrees
Field Angle (0-180):	171.2 Degrees
Field Angle (90-270):	171.2 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		2.67	5.08
6.00		1.18	7.62
8.00		0.666	10.2
10.0		0.427	12.7
12.0		0.296	15.2
14.0		0.218	17.8
16.0		0.167	20.3



ISOFootcandle Plot

Mounting Height - 2 Feet



Grid Lines in Units of Mounting Height





IES "BUG" Rating
(Back Light, Uplight, Glare)
Per IES TM-15-11



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	16.2	8.2%
FM	(30-60)	42.2	21.5%
FH	(60-80)	35.2	17.9%
FVH	(80-90)	4.3	2.2%
BL	(0-30)	16.2	8.2%
BM	(30-60)	42.2	21.5%
BH	(60-80)	35.2	17.9%
BVH	(80-90)	4.3	2.2%
UL	(90-100)	0.3	0.2%
UH	(100-180)	0.3	0.2%
Total		196.5	100.0%
BUG Rating	B0 U1 G0		